

NOVEMBER/DECEMBER 2025

**23PEMB34A — BIOSAFETY, BIOETHICS
AND IPR**

Time : Three hours

Maximum : 75 marks



SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. Define Intellectual Property Rights (IPR).
2. What is copyright?
3. What is the USPTO?
4. Name some popular patent databases.
5. How do patent laws differ for biotechnology inventions across countries?
6. Why is there a push for a global patent system?
7. Why is there a need for bioethics?
8. Define bioethics.

9. Why is ethical approval needed for clinical research on human subjects?
10. What is xeno-transplantation, and why is it ethically debated?

SECTION B — (5 × 5 = 25 marks)

Answer ALL questions.

11. (a) Explain the TRIPS.
Or
(b) Give elaborate note on GATT.
12. (a) Elucidate patent search methods.
Or
(b) Give a brief account on patent mapping.
13. (a) Explain the Territorial nature of patents.
Or
(b) Discuss about demerits of uniform patent law.
14. (a) Explain about the social and cultural issues.
Or
(b) Elaborate note on Food crops.

15. (a) Elucidate the Importance of Gene therapy.
Or
(b) Elaborate note on xeno transplantation.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Describe the Intellectual Property Rights.
17. Discuss about PCT.
18. Write a detailed account on Global patent system.
19. Explain about the Bioethics and GMO's.
20. Describe in detail about Human genome project.
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